

NON-VOLATILE MEMORY DEVICE HAVING DUAL GATE AND METHOD OF FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A non-volatile memory device including a control gate pattern
having a tunnel insulation pattern, a trap-insulation pattern, a blocking
insulation pattern and a control gate electrode, which are stacked on a
semiconductor substrate. A selection gate pattern is disposed on the
semiconductor substrate at one side of the control gate pattern. A gate
10 insulation pattern is interposed between the selection gate electrode and
the semiconductor substrate, and between the selection gate electrode
and the control gate pattern. A cell channel region includes a first
channel region defined in the semiconductor substrate under the
selection gate electrode and a second channel region defined in the
15 semiconductor substrate under the control gate electrode.